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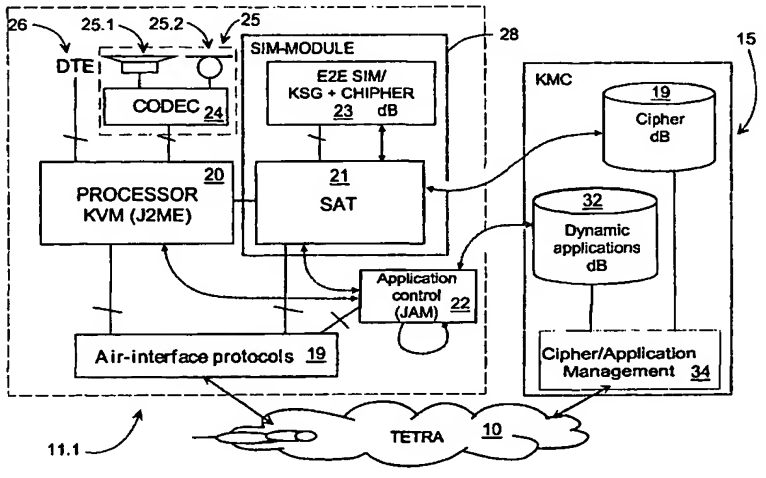
(54) Title: SYSTEM IN A DIGITAL WIRELESS DATA COMMUNICATION NETWORK FOR ARRANGING END-TO-END ENCRYPTION AND CORRESPONDING TERMINAL EQUIPMENT



(57) Abstract: The invention concerns a system in a digital wireless data communication network (10) for arranging end-to-end (e2e) encryption, especially for communication in audio form in which the data communication network (10) two or more pieces of terminal equipment (11.1, 11.2) are communicating with one another, including at least - a codec (24) for converting an analog audio signal into a dataflow and vice versa, - air-interface encryption means (19, 30), - means (28) for management of encryption parameters (TEK, IV) stored in connection with the terminal equipment (11.1, 11.2) - an encryption key stream generator KSG (23) to generate an key stream segment (KSS) with the said encryption parameters (TEK, IV), - means (20) for encrypting a dataflow and for decrypting the encryption with the generated key stream segment (KSS, IV), - means (33.1, 33.2) for synchronization of the encrypted dataflow and for de-synchronizing the synchronization, and - at least one interface (19) for receiving encryption parameters from the data communication network (10), and wherein at least one of the pieces of terminal equipment belonging to the data communication network (10) is adapted to function as a special server terminal device (15), which manages and distributes at least encryption parameters (19) concerning the data communication network (10) to the other pieces of terminal equipment (11.1, 11.2) based on an established criterion. In the data communication network (10) a said special server terminal device (15) is also arranged to manage at least encryption and/or synchronization applications (32) and to distribute these according to an established criterion to the other pieces of terminal equipment (11.1, 11.2), and - in the terminal equipment (11.1, 11.2) are arranged functionalities (21, 22) for downloading and managing the said applications (32) as well as - data memory (23) for saving applications (32) and - a processor (20) and operating memory for carrying out applications (32).

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